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09/991,866	11/26/2001	Jin-Soo Lee	LGE-0017	3275

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EXAMINER	
ABEL JALIL, NEVEEN	
ART UNIT	**PAPER NUMBER**
2175	5

DATE MAILED: 02/02/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No.	Applicant(s)	
	09/991,866	LEE ET AL.	
	Examiner	Art Unit	
	Neveen Abel-Jalil	2175	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☐ Responsive to communication(s) filed on _____.

2a)☐ This action is **FINAL**. 2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) 1-23 is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) 1-23 is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. §§ 119 and 120

12)☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☒ All b)☐ Some * c)☐ None of:

1.☒ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

13)☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application) since a specific reference was included in the first sentence of the specification or in an Application Data Sheet. 37 CFR 1.78.

a) ☐ The translation of the foreign language provisional application has been received.

14)☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121 since a specific reference was included in the first sentence of the specification or in an Application Data Sheet. 37 CFR 1.78.

DOV POPOVICI
SUPERVISORY PATENT EXAMINER
TECHNOLOGY CENTER 2100

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☐ Information Disclosure Statement(s) (PTO-1449) Paper No(s) _____.
4) ☐ Interview Summary (PTO-413) Paper No(s). _____
5) ☐ Notice of Informal Patent Application (PTO-152)
6) ☐ Other:

DETAILED ACTION

Claim Rejections - 35 USC § 102

1. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

> A person shall be entitled to a patent unless –
>
> (e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

2. Claims 1-6, 13-14, and 16-23 are rejected under 35 U.S.C. 102(e) as being anticipated by Vaithilingam et al. (U.S. Patent No. 2002/0159640 A1).

As to claim 1, Vaithilingam et al. discloses a multimedia retrieval method, comprising:

determining a descriptor weight in accordance with a combination of descriptors, from a plurality of descriptors for a query (See abstract, also see pages 3-4, paragraphs 0026-0029);

associating the descriptor weight to a multimedia descriptor (See page 4, paragraphs 0027-0028); and

retrieving a multimedia object based on a selected weight corresponding to the combination of descriptors for the query (See page 5, paragraph 0036).

As to claim 2, Vaithilingam et al. discloses wherein determining the descriptor weight is accomplished through a prior retrieval result of retrieving images, using the

combination of descriptors, or a feedback given by a user regarding a similar object in connection with group data on any similar objects defined in advance (See pages 6-7, paragraphs 0039-41, wherein "prior" reads on "history", also see page 3, paragraphs 0023-0024, wherein "group data" reads on "clustering").

As to claim 3, Vaithilingam et al. discloses wherein descriptors that identify increasing similarity between the similar objects are provided increasingly higher descriptor weights (See page 5, paragraphs 0036-0037).

As to claim 4, Vaithilingam et al. discloses further comprising:

measuring a similarity on the similar object, for which the user gave feedback, or the prior retrieval result using every descriptor weight included in the multimedia descriptor; and

retrieving the multimedia object based on the selected weight outputting a highest similarity (See pages 3-4, paragraphs 0026-0029, also see page 5, paragraph 0037).

As to claim 5, Vaithilingam et al. discloses wherein if a user selects a particular descriptor for the retrieval, only the descriptor weight of the particular descriptor selected, from the combination of descriptors included in the multimedia descriptor, is used for the retrieval (See page 8, claims 8-11 language).

As to claim 6, Vaithilingam et al. discloses wherein if a user designates a query object and a retrieval object, only the combination of descriptors corresponding with the

retrieval object and the query object is used for the retrieval (See page 7, paragraphs 0043-0045, also see page 8, claim 12 language).

As to claim 13, Vaithilingam et al. discloses a multiweight generating method, comprising:

obtaining a weight value representing an importance of a descriptor included in a multimedia object (See page 5, paragraph 0037); and

obtaining data corresponding to the descriptor that indicates what the descriptor intends to describe (See page 2, paragraph 0019, also see page 3, paragraph 0022).

As to claim 14, Vaithilingam et al. discloses a multimedia retrieval medium, comprising:

a plurality of descriptors that identify a multimedia object, for retrieval from a multimedia source (See page 5, paragraph 0036); and

a data feature containing an optimum weight data in accordance with each combination of descriptors for a query (See page 5, paragraph 0037).

As to claim 16, Vaithilingam et al. discloses a multimedia retrieval method, comprising:

determining a descriptor weight for each of a plurality of descriptors used in a first combination to form a multimedia descriptor query (See page 5, paragraphs 0036-0037); and

retrieving a group of first multimedia objects based on the descriptor weights corresponding to the first combination of descriptors (See page 9, paragraphs 0036-0037).

As to claim 17, Vaithilingam et al. discloses further comprising:

determining the descriptor weight for each of a plurality of descriptors used in a second combination to form a subsequent multimedia descriptor query (See page 5, paragraph 0037);

retrieving a group of second multimedia objects based on the descriptor weights corresponding to the second combination of descriptors (See page 8, claims 4-5 language), wherein

the group of second multimedia objects has a higher correlation to a desired multimedia object than the group of first multimedia objects (See page 8, claims 5-10 language).

As to claim 18, Vaithilingam et al. discloses wherein:

the descriptor weights for the plurality of descriptors used in the second combination distinguish a particular multimedia object selected from the group of first multimedia objects from all other multimedia objects within the group of first multimedia objects (See page 8, claims 10-13 language).

As to claim 19, Vaithilingam et al. discloses wherein:

the descriptor weights for the plurality of descriptors used in the second combination distinguish a particular multimedia feature selected from a group of features associated with the group of first multimedia objects from all other multimedia objects within the group of first multimedia objects (See page 8, claims 5-8 language).

As to claim 20, Vaithilingam et al. discloses further comprising:

(a) replacing the first combination of descriptors and associated descriptor weights with the second combination of descriptors and associated descriptor weights (See page , paragraphs 0036-0038, also see page 3, paragraphs 0023-0025);

(b) replacing the group of first multimedia objects with the group of second multimedia objects (See page 3, paragraphs 0023-0026, and see page 4, paragraphs 0027-0034);

(c) determining the descriptor weight for each of the plurality of descriptors used in a new determination of the second combination to form the subsequent multimedia descriptor query, based on the particular multimedia object selected by a user from the group of first multimedia objects (See page 8, claims 10-13 language); and

(d) retrieving the group of second multimedia objects based on the descriptor weights corresponding to the second combination of descriptors (See page 3, paragraphs 0023-0025, also see page ; and

repeating steps (a) through (d) in sequence until the group of second multimedia objects reaches a predetermined level of correlation with a desired multimedia object (See page 9, claim 20 language, also see page 3, paragraphs 0024-0025).

As to claim 21, Vaithilingam et al. discloses further comprising:

(a) replacing the first combination of descriptors and associated descriptor weights with the second combination of descriptors and associated descriptor weights (See page , paragraphs 0036-0038, also see page 3, paragraphs 0023-0025);

(b) replacing the group of first multimedia objects with the group of second multimedia objects (See page 3, paragraphs 0023-0026, and see page 4, paragraphs 0027-0034);

(c) determining the descriptor weight for each of the plurality of descriptors used in a new determination of the second combination to form the subsequent multimedia descriptor query, based on the particular multimedia feature selected by a user from the group of first multimedia objects (See page 5, paragraphs 0036-0038); and

(d) retrieving the group of second multimedia objects based on the descriptor weights corresponding to the second combination of descriptors (See page 4, paragraphs 0027-0029); and

repeating steps (a) through (d) in sequence until the group of second multimedia objects reaches a predetermined level of correlation with a desired multimedia object (See page 5, paragraphs 0036-0037).

As to claim 22, Vaithilingam et al. discloses wherein:

the group of features associated with the group of first multimedia objects is identified by a tabulation of textual descriptions of the features (See page 8, claim 12 language).

As to claim 23, Vaithilingam et al. discloses wherein:

the group of features associated with the group of first multimedia objects is identified by a tabulation of mathematical representations of the features (See page 4, paragraphs 0033-0034, also see page 6, paragraph 0039).

Claim Rejections - 35 USC § 103

3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

4. Claims 7-12, and 15 are rejected under 35 U.S.C. 103(a) as being unpatentable over Vaithilingam et al. (U.S. Patent No. 2002/0159640 A1) in view of Riverieulx de Varax (U.S. Patent No. 6,507,841 B2).

As to claim 7, Vaithilingam et al. discloses a multimedia retrieval method, comprising:

determining a descriptor weight of a query for the multimedia retrieval (See page 8, claim 10 language);

associating the descriptor weight to a multimedia descriptor (See page 5, paragraphs 0036-0038); and

retrieving a multimedia object based on a selected weight corresponding to the query, among other descriptor weights included in the multimedia descriptor (See page 5, paragraphs 0037-0038, also see page 4, paragraphs 0028-0029).

Vaithilingam et al. does not teach in accordance with a viewpoint.

Riverieulx de Varax teaches in accordance with a viewpoint (See Riverieulx de Varax column 4, lines 23-48, also see Riverieulx de Varax column 5, lines 17-50).

Therefore, it would have been obvious to a person having ordinary skill in the art at the time the invention was made to have modified Vaithilingam et al. to include in accordance with a viewpoint.

It would have been obvious to a person having ordinary skill in the art at the time of the invention was made to have modified Vaithilingam et al. by the teaching of Riverieulx de Varax to include in accordance with a viewpoint because associating the query with a viewpoint based on user prior selections or feedback provides for more accurate user customized results.

As to claim 8, Vaithilingam et al. as modified discloses wherein determining the descriptor weight is accomplished through a prior retrieval result from retrieving images or feedback given by a user regarding a similar object, in connection with group data on any similar objects defined in advance (See pages 6-7, paragraphs 0039-41, wherein "prior" reads on "history", also see page 3, paragraphs 0023-0024, wherein "group data" reads on "clustering", also see page 7, paragraph 0045).

As to claim 9, Vaithilingam et al. as modified discloses wherein a descriptor that identifies increasing similarity between the similar objects is provided a higher descriptor weight (See page 5, paragraphs 0036-0037).

As to claim 10, Vaithilingam et al. as modified discloses further comprising:

measuring a similarity on the similar object, for which the user gave feedback, or the prior retrieval result using every descriptor weight included in the multimedia descriptor (See Riverieulx de Varax column 3, lines 17-67, also see Riverieulx de Varax column 4, lines 38-48); and

retrieving the multimedia object based on the selected weight outputting a highest similarity (See pages 3-4, paragraphs 0026-0029, also see page 5, paragraph 0037).

As to claim 11, Vaithilingam et al. as modified discloses further comprising:

displaying a particular viewpoint of the query, among other viewpoints of the query (See Riverieulx de Varax column 4, lines 23-48, also see Riverieulx de Varax column 5, lines 17-50); and

retrieving the multimedia object based on the particular viewpoint of the query selected by a user (See Vaithilingam et al. page 5, paragraph 0037).

As to claim 12, Vaithilingam et al. discloses a multiweight generating method, comprising:

obtaining a weight value representing an importance of a descriptor included in a multimedia object (See page 5, paragraphs 0036-0037).

Vaithilingam et al. does not teach obtaining data on a viewpoint of a query for obtaining the weight value.

Riverieulx de Varax teaches obtaining data on a viewpoint of a query for obtaining the weight value (See Riverieulx de Varax column 3, lines 17-55, also see Riverieulx de Varax column 5, lines 16-59).

Therefore, it would have been obvious to a person having ordinary skill in the art at the time the invention was made to have modified Vaithilingam et al. to include obtaining data on a viewpoint of a query for obtaining the weight value.

It would have been obvious to a person having ordinary skill in the art at the time of the invention was made to have modified Vaithilingam et al. by the teaching of Riverieulx de Varax to include obtaining data on a viewpoint of a query for obtaining the weight value because associating the query with a viewpoint based on user prior selections or feedback provides for more accurate user customized results.

As to claim 15, Vaithilingam et al. discloses wherein the combination of descriptors and the optimum weights are different (See page 5, paragraph 0037).

Vaithilingam et al. does not teach depending on a viewpoint of the query.

Riverieulx de Varax teaches depending on a viewpoint of the query (See column 4, lines 23-48, also see column 5, lines 17-50).

Therefore, it would have been obvious to a person having ordinary skill in the art at the time the invention was made to have modified Vaithilingam et al. to include depending on a viewpoint of the query.

It would have been obvious to a person having ordinary skill in the art at the time of the invention was made to have modified Vaithilingam et al. by the teaching of Riverieulx de Varax to include depending on a viewpoint of the query because

associating the query with a viewpoint based on user prior selections or feedback provides for more accurate user customized results.

Conclusion

5. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

DE VARAX (U.S. Pub. No. 2002/0083031 A1) teaches methods for refining descriptors.

Auspitz et al. (U.S. Pub. No. 2002/0198871 A1) teaches semiotic analysis system.

6. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Neveen Abel-Jalil whose telephone number is 703-305-8114. The examiner can normally be reached on 8:00AM-4: 30PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Dov Popovici can be reached on 703-305-3830. The fax phone number for the organization where this application or proceeding is assigned is 703-746-7239.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is 703-305-3900.

Neveen Abel-Jalil
January 20, 2004

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SUPERVISORY PATENT EXAMINER
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